[][3]uint16 Legal\_Moves

[i][0] 🡪 x\_pos

[i][1] 🡪 y\_pos

[i][2] 🡪 Status: 64: Default -> set has\_moved to 0

0-63: Move involves a take -> Index of Piece to take, set has\_moved to 0

Pawn: 0-63: Move is en passant -> Index of en passant Pawn to be deleted, set has\_moved to 0

65: Move is TwoStep-> set has\_moved to moves\_counter

64: Normal Move

66-129: Move is Take -> Index = -66

King: 0-63: Move is Castle -> Index of Rook to be moved, set King.has\_moved to 0, set Rook.has\_moved to 0

64: Normal Move

66-129: Move is Take -> Index = -66

int16 Has\_moved

🡪Status: 0: Default -> Piece hasn’t moved

1: Piece has moved

Pawn: -1 Default -> Piece hasn’t moved

1. Piece has moved with OneStep move

1-max: Piece has moved with TwoStep move -> important for en passant

PGN Notation {Piece; Original\_Field; Capture\_Indicator (x); New\_Field, Promotion; Check/Checkmate Indicator (+/#)}